



CERTIFICATE NUMBER 22-2298386-PDA
EFFECTIVE DATE 30-August-2022
EXPIRATION DATE 29-August-2027
ABS TECHNICAL OFFICE Singapore Engineering Services

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

VAF INSTRUMENTS

located at

VIERLINGHSTRAAT 24, 3316 EL DORDRECHT, NETHERLANDS

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Monitor, Display Unit

Model ShaPoLi SDB-3 & SBP-3

This Product Design Assessment (PDA) Certificate remains valid until 29-August-2027 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Vibin Chandrabose, Senior Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement

VAF INSTRUMENTS

VIERLINGHSTRAAT 24

3316 EL DORDRECHT

Netherlands

Telephone: 31-78-618-3100

Fax: 31-78-617-7068

Email: quality@vaf.nl

Web: www.vaf.nl

Tier: 3 - Type Approved, unit certification not required

Product: Monitor, Display Unit

Model: ShaPoLi SDB-3 & SBP-3

Endorsements:

Intended Service:

For use on ABS Classed Vessels and Offshore Facilities in accordance with the listed ABS Rules and International Standards.

Description:

Shaft Power Monitoring, Alarm and Logging for EEXI-SHaPoLi applications.

Rating:

SDB-3 Shapoli Data Logging Box:

Supply Voltage: 100 – 230VAC, 50/60Hz

Power Consumption: 24 Watt

Output: Voltage free contact

Ambient Temperature: -20 to 55°C

Humidity Range: 0 – 95% RH

Protection Class: IP44

Dimensions: 400 x 300 x 155 mm (w x h x d)

Net weight: Approx. 8kg

SBP-3 Shapoli Bridge Panel PC:

Supply Voltage: 24VDC

Dimensions: 218,16 x 162,67 x 46,5 mm (w x h x d)

Cut Out: 170 x 120 mm (w x h)

Cut Out Depth: 32mm

Front Panel Thickness: 17mm

Protection Class: IP44

Temperature range: -10 up to +50°C

Display: Color TFT LCD, Touch screen 8'' (1024 x 600 dots) with adjustable backlight

Operation system: Android

Net weight: 940g

Software version: 1.0.0

Service Restriction:

1. Unit certification is not required for the product or products covered in this certificate.
2. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standards, including inspection standards and tolerances, must be clearly defined.
3. This PDA certificate only covers class aspect of the electrical arrangement, EEXI Technical Files that include ShaPoLi arrangement are to be submitted separately for each vessel to cover Statutory aspect for approval work performed on behalf of flag states.
4. The system is categorized as Category I computer-based system.

Comments:

1. The manufacturer has provided for a declaration about the control of, or the lack of Asbestos in this product.
2. The system does not send out any control signal. It only activates alarm and records data derived from T-sense, TT-sense, or 3rd party torque sensor when the shaft power exceeds limit.

Notes/Drawing/Documentation:

Sebert Trillingstechniek B.V. Report No. M22.001-P22.001rev.01 VAF Instruments, Maritime vibration test on an SDB-3 and Panel PC dated 15-02-2022, Revision: 0, Pages: 21

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Sebert Trillingstechniek B.V. Report No. M22.002-P22.002 VAF Instruments, Climate tests on an SDB-3 and Panel PC dated 22-02-2022, Revision: 0, Pages: 20

Derka Report No. 2264237.0501-EMC, EMC Test Report dated 14-03-2022, Revision: 0, Pages: 46

Drawing No. Test Doc no 1, Test Document VAF ShaPoLi system, Revision: 0, Pages: 23

Drawing No. Test Doc no 2, Att 1. Checklist Performance Test - VAF ShaPoLi system - Approved, Revision: 0, Pages: 5

Drawing No. Test Doc no 3, Att 2a. Product Bulletin - Panel PC, Revision: 4.1, Pages: 4

Drawing No. Test Doc no 4, Att 2b. Product Bulletin - SDB-3, Revision: 4, Pages: 6

Drawing No. 22-5160469, Manufacturing Assessment of VAF Instruments B.V., Revision: 0, Pages: 3

Drawing No. 20-LD1964534-PDA, T-Sense and TT-Sense, Revision: 0, Pages: 4

Drawing No. KSD.2.8, Software Releases, Revision: 0, Pages: 2

Drawing No. KSD.2.8.A, Flowchart Software Release, Revision: 0, Pages: 1

Terms of Validity:

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Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

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STANDARDS

ABS Rules:

2022 Rules for Conditions of Classification – 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2022 Rules for Building and Classing Marine Vessel Rules: 4-8-3/1.7, 4-8-3/1.9, 4-8-3/1.11.1, 4-8-3/1.17, 4-9-3/Table 1, 4-9-3/Table 2, 4-9-9/3, 4-9-9/7, 4-9-9/Table 1

2022 Rules for Conditions of Classification - Offshore Units and Structures 1-1-4/9.7, 1-1-A2 and A3, which covers the following:

2022 Rules for Building and Classing Mobile Offshore Unit Rules: 4-3-1/11, 4-3-1/15, 4-3-1/17.1, 4-3-1/Table 1

2022 Rules for Conditions of Classification - Light and High Speed Craft 1-1-4/11.9, 1-1-A2 and A3, which covers the following:

2022 Rules for Building and Classing High Speed Craft Rules: 4-6-1/11, 4-6-1/15, 4-6-1/17.1, 4-6-1/Table 1, 4-7-8/Table 1, 4-7-8/Table 2, 4-7-9/3, 4-7-9/7, 4-7-9/Table 9

National:

NA

International:

IMO Resolution MEPC.335(76): 2021 GUIDELINES ON THE SHAFT / ENGINE POWER LIMITATION SYSTEM TO COMPLY WITH THE EEXI REQUIREMENTS AND USE OF A POWER RESERVE, Section 2.1.1 "ShaPoLi"

Government:

NA

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EUMED:

NA

OTHERS:

NA